RESTRICTED W Stup Ref: 200-V/17 HEADQUARTERS E86m EUROPEAN THEATER OF OPERATIONS CLASSIFICATION CANCELLED UNITED STATES ARMY by authority of Office of the Chief Surgeon THE SUBJECT CENERAL APO 887 BATE 20 NOV 1950 Lt. Colonel M. E. Beckham, MSC Medical Intelligence Summary No. 17 Security Officer, S.S.O. 6. Exchlore 11 August 1944 1. Translation of certain German documents captured in Normand A number of documents prepared by various echelons of a German Army Medical Service have been received and studied. In the following paragraphs some of the more interesting and important material has been translated or summarized. An order issued by the Surgeon General of the Wehrmacht on 15 Feb 1944 deals with the prevention and treatment of malaria. It is of special interest since it delineates those areas considered by the German High Command to be potentially or actually malarious. Oberkommand der Wehrmacht Berlin, 15 Feb 1944 Surgeon General I. Prevention and Treatment of Malaria. 1. Preventive treatment will be carried out without exception by all units which are stationed in the area described below. The malarious area is defined as beginning in the west with the area of the Rhone Delta south of a line from Montpellier, through Nimes, and Avignon, to Toulon. It then continues along the French Mediterranean coast to Mentone, thence along the foothills of the Italian Alps to Graz (in Austria). From Graz, the boundary is formed by the Rivers Mur, Drava and Danube, as far east as the Iron Gate, then follows the

Southern and Eastern Carpathians to Cernauti, thence to Kiev and Kasan.

- 2. Preventive treatment starts on the 1st of April of each year and ends on the 31st of October of same year. In general, north of this line preventive treatment is not necessary. In special cases the Surgeon of the Army Group will make decision on the basis of the Army Surgeon's report.
- 3. The preventive treatment consists of: Daily after meals, one tablet atabrine 0.06 grams with abundance of liquid. (One tablet daily). Any change of this dosage is forbidden.
- 4. Terminal treatment will be uniform for the whole army and will be carried out on the 1st of November each year, using atabrine and possibly plasmochin. This treatment will follow immediately after the last day of atabrine preventive treatment. Atabrine, 0.1 gram will be given three times daily after meals for seven days, followed by plasmochin, 0.01 grams 3 times daily after meals for three days. Plenty of water should be taken.
- 5. Units which depart from this malaria-danger area, or men on furlough, or being transferred, will be given the terminal treatment as per paragraph 4.

(Sections II and III describe the routine treatment of malaria and give instructions concerning other preventive measures.)

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b. Reactions following Salvarsan.

Previous information has indicated that the German High Command has not been satisfied with the purity and efficacy of Italian manufactured arsenicals. This document indicates that considerable difficulty has been encountered in the use of Salvarsan of German manufacture.

Army Surgeon

HQ OKH 1 March 1944

Subject: Reactions following the use of Salvarsan.

In order to avoid possible drug reactions, the following amendment from the Army Group Surgeon will be published and the previously mentioned prohibition will be generalized.

It has been noticed that certain patients receiving repeated Salvarsan injections have had continuing evidence of drug reactions since the initiation of treatment.

The use of Salvarsan will be prohibited on ambulant patients, who previously suffered any type of health disturbance.

During the Salvarsan treatment the possibility of preventive vitamin therapy will be kept in mind.

c. Snake Serum.

On the order of the Army Group Surgeon all medical units were instructed to keep snake serum in stock and to give routine lectures concerning the treatment of snake bite. The serum used is described in detail, as follows:

Snake Serum -- (Behringwerke) -- against the bite of the best known vipers. Poisoning by vipers will be prevented by use of specific antivenin. The snake serum, produced in the Behringwerke -- Marburg and obtained from horses which have been immunized with selected viper poison, is capable of neutralizing the poison of all European poisonous snakes. It will also neutralize the poison of Vipera lebetina, which is prevalent in Western Asia and North Africa, certain Bitis species, especially the puff adder (Bitis arietans) and certain species of Cerastes. The serum will not neutralize cobra venom. In general, the bite of poisonous snakes will be deadly if the poison comes directly into the blood stream. In these cases the serum will be administered as soon as possible intravenously in the quantity of 10 cc. or more, as per the severity of the general symptoms. Until the serum is available, it is advisable to keep the injured limb immobilized, apply a tourniquet and suck out the poison after widening the wound with sharp incisions. Cauterization is useless; also drinking of alcohol. Experience proves that an injection of 1 to 2 cc. of a weak solution of potassium permanganate in the vicinity of the wound is effective. The tourniquet should not be kept in place more than two hours.

d. Louse Borne Typhus Fever.

An Army Order of 21 August 1943 outlines specifically the army's responsibility in the use of typhus vaccine in the prevention of typhus fever. This order bears out previous reports on the restricted use which is made of this material.

Army Group Surgeon Oberkommando Heeresgruppe D

21 August 1943

Subject: Louse borne typhus fever--vaccine and louse borne typhus fever inoculation (will be called typhus in the text.)

- 1. Typhus inoculation will be carried out actually in typhus denger areas or on units which are to go into such areas. (Such typhus danger areas are so far the invaded eastern territory, the Balkan Peninsula and certain parts of the North Norwegian Coast.)
- 2. In addition to areas mentioned in paragraph 1, typhus inoculations will be carried out on units taking care of prisoners of war; further, with personnel of delousing stations, typhus lazarettes, lazarette trains, and transport personnel of the Luftwaffe.
- 4. Typhus inoculation is limited also to the following personnel:
 - a. All soldiers 45 years of age or older, clerks and also specialists following the army.
 - b. All surgeons and nurses exposed to typhus danger.
 - c. All male and female personnel employed in typhus danger positions.

 - d. Personnel of delousing stations.
 e. Personnel of hospital trains.
 f. Personnel taking care of prisoners of war.
 g. In case of typhus epidemics the endangered personnel, regardless of age or sex.

/s/ DR. BESEKE

e. Diphtheria.

The large number of cases of diphtheria occurring in Germany and occupied territories has prompted the issuance of the following order, on the authority of the Army Group Surgeon, OKH -- D.

> Army Group Surgeon OKH--D

17 April 1943

Subject: Diphtheria Inoculation.

The administration of diphtheria inoculation will be taken into consideration when diphtheria is endemic, epidemic or where severe cases can be found especially endangering units with young replacements, recruits, and soldiers under 25 years of age.

Inoculations must be entered in the service record.

/s/ DR. HAUBENREISSER

f. Evacuation of Casualties.

From the date of the following order (6 July 1944), it is apparent that the Germans have had considerable difficulty in effecting prompt evacuation of casualties. This order is not only an admonition but also contains certain instructions. Of especial interest are the remarks concerning the use of tourniquets, which according to the Germans, may be left on for two hours.

> Battalion Surgeon HQ Pi. Btl.-Angers

6 July 1944

Subject: Measures to Expedite Evacuation of Casualties to the Battalion Dressing Station.

It is not admissible that a man who was injured -- as happened in a company of this battalion two days ago -- was wounded at 1500 hours

and evacuated only around 2300 hours. Evacuation must not be delayed by looking after the personal belongings of the injured. The transportation from the battalion dressing station to the collecting station and from there to the main dressing station means another 25 kilometers.

Every company besides the Stb company received about 10 days ago the necessary white and red fabrics, with instructions to prepare Red Cross flags. The small Red Cross flag must be fixed on a stick and be kept in the boot of the first aid men to be handy at all times. The large Red Cross flag will be used for vehicles to evacuate casualties to the battalion dressing station.

In case of severe injuries the evacuation must be accomplished by means of any available vehicle, especially in the case where a tourniquet has been applied to a bleeding artery. This tourniquet should be applied only in severe cases after local pressure and elevation of the limb does not help.

As reported from the main dressing station amputations had to be performed because of unnecessary tourniquets, tourniquets applied by inexperienced personnel, and primarily because of tourniquets being left on too long. When a tourniquet has to be applied, it should be kept in mind that the same cannot remain longer than two hours and if possible it should be removed earlier. In case of severe arterial bleeding, the tourniquet may be applied only at the main dressing station and, therefor, the transportation must be as fast as possible.

The purpose of the Red Cross flags is so that the injured may be evacuated any time of the day even on enemy occupied roads. The Red Cross flag will be given consideration by the enemy.

The companies must report to the battalion regarding the prepared Red Cross flag by 10 July 1944; also a list of medical personnel and litter carriers must be submitted. In the event there are no litter carriers in the company, such personnel must be trained by the medical personnel and report to the battalion.

First aid packets are very scarce and must only be used for dressing of wounds; for lacerated wounds and inflamed places, mull and paper dressing are to be used.

g. German Document Captured in Normandy from the 9th Parachute Regt.

Parachute Army Oberkommando Army Surgeon 1 May 1944

Order No. 2/44

6. Use of Italian sera and vaccines. As per report of the Institution of Experimental Therapy in Frankfurt a/M, sera and vaccines of Italian origin, although not fully potent, may be used in emergency cases on German patients (in the event German sera is not available.

They must be used on Italian patients.

7. Administration of Morphine and Pervitin. By using a combination of morphine and pervitin, success has been achieved in eliminating the sleeping component of morphine without min-

imizing the analgesic effect. These facts are of importance in the transportation of patients who are under the influence a. To keep them awake and to eliminate the apathetic condition. b. To deepen the respiration to avoid pneumonia. Morphine and pervitin will be administered orally or subcutaneously in the dosage of: Morphine 0.01 - 0.03 Pervitin 0.01 - 0.015.

9. Grippe prophylaxis and therapy.

a. So far there is no effective medication for the prevention of grippe. Vitamin C seems to be effective in increasing resistance against infectious diseases.

b. There is no specific treatment for grippe. Chinin-Sulfonamide combinations have a favorable effect.

12. Codeine and Codeine Containing Preparations. Codeine tablets will no longer be produced or supplied. They will be replaced by Paracodin 0.01 in tablets. Paracodin 0.01 does not have the same effect as codeine 0.03. In certain cases two Paracodin tablets 0.01 may be used instead of one codeine tablet 0.03. In prescribed medications (mixtures, etc.) codeine may be used in the future. The use of codeine solution instead of codeine tablets is forbidden. In lazarettes prescribed medication containing codeine must be kept at a minimum.

Sulfonamide. Sulfonamides in lazarettes must be kept locked in narcotic cabinet. The use of this drug will be strictly controlled.

15. Missing medications. Below is a list of drugs in limited supply (*) and drugs no longer supplied (**).

* Acidol-Pepsin

of morphine.

* Acidum boricum

* Acidum laktic

* Acidum phenylchin, carb.

* Acidum tannic

** Adalin-Tabletten

* Aether

Bije Bije Aglusil-Amp.

Bật Bật Alkohol trichlorbutylicus

Albuoid-Amp. lo ccm

Alkalysol

ade ade Alumen ustum

Amphotropin-Tabletten

Anastil-Amp. ausser "stark" 3/k 3/k

林林 Anthrasol

Argentum colloid 静脉

No No Argochrom.

3fe 3fe . Argentamin

Aquazid. fest

Asthmolysin-Amp.

Atropin-sulfuric

Bacillol

Baktol

* Balsam peruv.

Cormed

* Cortenil

* Barium sulfuricum

* Bellafolin-Tabletten

* Bellergal-Tabletten

* Benzin-Petrolei

* Bismut-Verbindungen

** Bismut. tribromphenylic

** Bolus alba

* Borax

** Calcium Diuretin-Tabl.

* Calcium gluconicum-Amp.

* Calcium lakticum

* Campolon-Amp.

* Capsicum-Pflaster

** Cardiazol-Chinin

** Gaseosan

** Chinin-Urethan

* Cera flava

aje Chinidin sulfuric

* Chloramin, Roh-

* Choleval

* Cibazol-Amp.

aft aft Chologen

** Coffeinum natr.-benz.

* Coramin

** Neodorm-Bohnen

* Neorontyum

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* Cupr. sulfuric * Cylotropin-Amp. * Desholin-Amp.

** Cupr. sulturic

** Cylotropin-Amp.

** Decholin-Amp.

** Deriminal.

** Detoxin-Amp.

** Digipurat. liq.

** Digipurat. Suppos.

** Dijodtyrosin-Tabl.

** Dijodtyrosin-Tabl.

** Doryl-Amp.

** Cl. Caoao

** Dilaudid-Atropin-Amp.

** Ol. Lauri

** Eldoral-Tabl.

** Eleudron-Amp.

** Eleudron-Amp.

** Eleudron-Amp.

** Eumydrin-Tabl.

** Doryshamp.

** Ol. Carvi

** Eleudron-Amp.

** Ol. Carvi

** Eubasin-Amp.

** Ol. Menth. Pip.

** Orasthin

** Eupace

** Padutin-Losung

** Pandigal

* Faex medicinal

* Festal

* Flor. Chemominillae

* Flor. Tiliae

* Fol. Menth. pip.

* Fol. Salviae

* Progynon

* Fol. Sennae conc.

* Prostigmin

* Fol. Uvae ursi

* Gastrosil

* Guartamon

* Gelonida Alum. Subacet.

* Rad. Ipecacuaenhae

* Sagrotan

* Natr. citric.

* Natr. thiosulfulfor

* Luminal-Amp.

* Tonephin-Amp.

* Torantil

* Traubenzucker-Amp.

* Valvanol

* Varicodi

* Xifalmil

* Zanhirol * Natr. thiosulfuric.

* Luminal-Amp.

** Torantil

** Trigemin-Tabl. * Trypaflavin-Amp.

* Tumenol-Ammonium * Zephirol, flussig * Tutofusin-Amp. * Zephirol-Blattchen

** Uliron

** Neotropin-Dragees

* Padutin

* Padutin

* Padutin-Losung

* Pandigal

* Evipan-Natrium

* Papaverin-hydrochloricum

* Extr. Belladonnae

* Extr. Chamomillae fluid

* Pepsin

* Extr. Faecis

* Per-Abrodil

* Faex medicinal

* Festal

* Flor. Chamominillae

** Tinct. Ferri comp.

** Tinct. Strophenthi

** Theominal-Tabl.

** Ungt. Hydrarg. cinar 30%

* Varicodid-Amp.

** Xifalmilch

* Luminal-Amp.

h. Dysentery Vaccine. An order of 11 April 1944 describes the procedure to be followed in the immunization of dysentery vaccine. This is the first definite statement encountered concerning the use of this material although it has been noted in the service records of the German soldiers.

Oberkommando der Wehrmacht Surgeon General Berlin, 11 April 1944

S.O.P. FOR DYSENTERY INOCULATION 1944

For dysentery, vaccine manufactured in 1943 or 1944 must be used. Both vaccines have the same content. Other vaccines are not to be used. Vaccines will be supplied in bottles of 50 and 100 ccm.

The inoculation will be administered subcutaneously in doses of 0.5 - 1.0 - 1.0 ccm. at intervals of 7 days into the right and left chest. In addition, in August 1944 on order of higher medical headquarters "dysentery tablets 1944" ("Ruhrschutztabletten 1944") will be given to units where dysentery occurs frequently. The tablets will be taken three days consecutively, one tablet every morning on empty stomach. The effect of the parenteral dysentery inoculation will be reinforced by this oral administration. The inoculation must be entered on the soldier's service record. By 15 December 1944 experience reports must be submitted.

/s/ DR. HANDLOSER

i. Instructions for Regulation of Brothels in Invaded Territories

This consists of 13 Exhibits in German and in French.

Exhibit No. 1.

Posters on the brothel's door: "This house must not be entered by any soldier who has not reported to the dispensary. You may find the dispensary across the street." Signed by the CO.

Exhibit No. 2.

Same as Exhibit No. 1 - in French.

Exhibit No. 3.

Poster in the dispensary giving detailed instructions to the soldier.

Exhibit No. 4.

Also poster in the dispensary warning the soldiers against venereal disease.

Exhibit No. 5.

Sample of page in book where record of prophylaxis will be entered.

Exhibit No. 6.

Sample of permit with which the soldier may enter the brothel.

Exhibit No. 7.

Poster in dispensary showing the locations of licensed military brothels.

Exhibit No. 8.

- (a) This is a letter of hygienic instructions for the woman, werning of venereal disease.
 - (b) Same as Exhibit 8 (a) in French.

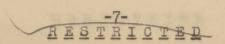


Exhibit No. 9.

Poster in the brothel for the soldiers. (This house controlled by 00 of the garrison. The entering of this house by Frenchmen is forbidden. Serving alcohol is forbidden. Avoid undue noise; fighting. The orders of the military police of the garrison must be obeyed. Health instructions for soldiers must be considered. This house may be kept open at a time fixed by the CO. The price is uniform - RM 3.)

Exhibit No. 10.

- (a) Letter to the owner of the brothel containing instructions concerning girls and running of the house.
 - (b) Same in French.

Exhibit No. 11.

Instructions for medical personnel in the dispensary.

Exhibit No. 12.

Orders for medical personnel in the prophylaxis room.

Exhibit No. 13.

Instructions for fine in case of violation of orders.

2. Iodine in the Disinfection of Water in Canteens.

A report from the Committee on Medical Research indicates that a tablet of iodine known as the Bursoline No. 3 Canteen Water Sterilizing Tablet has been found to be satisfactory in the purification of water for drinking. The tablet is rapidly soluble and produces its maximum iodine concentration in 1.25 min. at 0°C and 0.5 min. at 23°C. One tablet imparts a brownish tint, slight iodine odor and mild iodine taste. Two tablets produce a more marked but still tolerable taste and odor. One tablet per quart is cysticidal at 23° C in normal waters in 5 min. and in moderately polluted, alkaline and turbid waters in 10 min. Highest iodine demands are associated with waters in which there is much decomposed vegetable matter in solution. In such instances two tablets may be required. In comparison with Bursoline No. 3, six standard Halazone tablets per quart are required to be cysticidal at 23° C in 10 min. The Bursoline No. 3 tablet contains iodine in the inorganic form and the iodine intake is below the toxic level.

3. Additional medical intelligence material received in this office will be included in Medical Intelligence Summaries to be issued from time to time.

For the Chief Surgeon:

WILLIAM A. HOWARD

Lt. Col., Medical Corps Chief, Intelligence Branch

Operations Division.